



U.S. Department
of Transportation
**Federal Aviation
Administration**

Advisory Circular

Subject: CONTROL OF PRODUCTS AND
PARTS SHIPPED PRIOR TO TYPE
CERTIFICATE ISSUANCE

Date: 3/19/96
Initiated by: AIR-200

AC No: 21-32A
Change:

1. PURPOSE. This advisory circular (AC) provides a means, but not the only means, to control products and parts shipped prior to the issuance of a type certificate (TC) or supplemental type certificate (STC) by a manufacturer with an approved production inspection system (APIS) or production certificate (PC). For the purposes of this AC, the acronym "TC" includes "STC." This AC broadens the scope of AC 21-32, Control of Products and Parts Shipped Prior to Type Certificate Issuance, by including completed aircraft, aircraft engines, propellers, and parts thereof shipped prior to TC/STC issuance.

2. CANCELLATION. AC 21-32, Control of Products and Parts Shipped Prior to Type Certificate Issuance, dated October 14, 1992.

3. RELATED CODE OF FEDERAL REGULATIONS (CFR) .

- a. Title 14 CFR part 21, Subpart B, Type Certificates.
- b. Title 14 CFR part 21, Subpart E, Supplemental Type Certificates.
- c. Title 14 CFR part 21, Subpart F, Production Under TC Only.
- d. Title 14 CFR part 21, Subpart G, Production Certificates.
- e. Title 14 CFR part 21, Subpart L, Export Airworthiness Approvals.
- f. Title 14 CFR part 45, Identification and Registration Marking.

4. BACKGROUND. Aircraft, aircraft engine, and propeller manufacturers must often ship completed products, detail parts, components, and subassemblies prior to TC issuance to support their overall TC programs. The guidance in this AC will facilitate TC programs as it contains procedures to control the configuration of urgently needed products and parts shipped during the TC process. It will also help the industry ensure that Federal Aviation Administration (FAA) approved parts are available for installation at the completion of the TC program.

5. REGULATORY REQUIREMENTS.

- a. Applicants for type certification of aircraft engines, and propellers are responsible under 14 CFR part 21, section 21.53(a), for submitting a statement of conformity to the FAA.
- b. Applicants for type certification of aircraft or parts thereof are responsible under section 21.53(b), for submitting a statement of conformity to the FAA.
- c. Manufacturers with an APIS are also responsible under section 21.130 for submitting a statement of conformity to the FAA which must include:

- (1) For each product, a statement that the product conforms to its TC and is in condition for safe operation.
- (2) For each aircraft, a statement that the aircraft has been flight checked.
- (3) For each aircraft engine or variable pitch propeller, a statement that the engine or propeller has been subjected by the TC holder to a final operational check.

d. Production certificate holders are responsible for complying with section 21.165(b) by ensuring that each completed product and part submitted for airworthiness certification conforms to the approved design and is in a condition for safe operation.

6. GENERAL. For any shipments prior to TC issuance, the applicant should submit a written proposal to the local FAA Manufacturing Inspection District Office requesting approval to ship completed products or parts thereof. Products or parts should not be shipped to ANY country whose authorities would prohibit the entry of FAA personnel into their country, or inhibit in any manner FAA activities. The applicant should provide assurance of access to the FAA.

a. The proposal should include documented procedures detailing how the products or parts thereof will be controlled and positively identified consistent with paragraphs 7 and 8 of this AC. The applicant should give the FAA sufficient time to evaluate the viability of the proposal and coordinate with the Civil Aviation Authority (CAA) of other countries if necessary.

NOTE: The FAA may request the CAA of the country where the product or part will be located to assist in conducting surveillance and inspections. Therefore, applicants are advised that certain CAAs may charge a fee for services rendered. In this instance, the payment of CAA fees is the responsibility of the applicant. The CAA of other countries may prohibit certain FAA activities, including functions performed by FAA designees, at facilities operating within their regulatory system. Any CAA assistance is subject to written agreements between the FAA and the respective CAA.

b. The proposal should include any planned use of FAA designees to conduct conformity inspections or make airworthiness determinations on behalf of the FAA. These functions would be performed on-site for each aircraft, aircraft engine, propeller, part, or lot of parts being shipped prior to TC issuance. The use of designees could be a factor in the FAA's approval of the proposal since the use of designees at a location outside the United States may alleviate an undue burden on the FAA.

c. Applicants should be prepared to furnish the FAA or its designee with any and all design or quality control data which may be required to conduct conformity inspections or make airworthiness determinations.

d. The proposal should include procedures to control completed aircraft, aircraft engines, or propellers, and parts thereof that are directly shipped from suppliers.

e. Refer to paragraph 7 of this AC for additional guidance related to aircraft, aircraft engines, and propellers. Refer to paragraph 8 of this AC for additional guidance related to applicable aircraft, aircraft engine, and propeller parts.

7. AIRCRAFT, AIRCRAFT ENGINES, AND PROPELLERS (PRODUCTS) . The proposal should contain the following as a minimum:

a. PRIOR TO TYPE CERTIFICATION .

(1) The procedures to track part configuration from the time of manufacture through the time of shipment and until the TC is issued. The procedures should require the use of FAA Form 8130-9, Statement of Conformity, to establish the status of the part by listing all deviations to the proposed type design.

(2) The estimated quantity of products to be shipped and the destination(s) (country, facility name, address, etc.).

(3) The reason why the products need to be shipped prior to TC issuance.

(4) The approximate completion date of the TC program and estimated total operational hours that each product will accumulate prior to TC issuance.

(5) The requirement to monitor product operation and the entry of inspection and maintenance activities into the product's records. This should include requirements to record any operation that occurs in excess of the product's proposed operating limitations. This includes parts used for static and flight tests that may have exceeded design limits.

(5) The method of identifying the product with its airworthiness status clearly stated; e.g., "not for revenue service - flight test only" or "not for revenue service - type certificate pending."

(6) Method of monitoring the segregated storage and storage conditions of products at the destination facility.

(8) The facility location where the applicant will demonstrate that the product conforms to its proposed design and is in a condition for safe operation. The proposal should also include procedures to be used to update the product to its approved TC design, and the approximate date this will occur.

NOTE: The location of this facility could be a factor in the FAA's approval of the proposal since a location outside the United States may create an undue burden on the FAA.

(9) The proposed use of any designees to conduct conformity inspection on behalf of the FAA.

b. AFTER TYPE CERTIFICATION .

(1) Procedures for submitting FAA Form 8130-9, stating that the product conforms to its approved design and is in a condition for safe operation. The procedures should also require the inclusion of a statement in Block D that the product's final operational check was completed and date the operational check was conducted.

(2) Procedures for marking the aircraft or aircraft engine data plate, propeller, propeller blade, or propeller hub with the TC NUMBER ONLY. Depending on the individual program, the product may be considered produced under TC only versus produced under a PC or APIS. The FAA will determine on a case-by-case basis the appropriate marking in accordance with part 45, Identification and Registration Marking.

8. AIRCRAFT PARTS, AIRCRAFT ENGINE PARTS, AND PROPELLER PARTS . The proposal should contain the following as a minimum:

a. Procedures to track the configuration of the parts from the time of manufacture through the time of shipment and until the TC is issued. The procedures should require the use of FAA Form 8130-9, to establish the status of the part by listing all deviations to the proposed type design.

b. The method of identifying and segregating parts shipped by the applicant or its suppliers with direct ship authority to preclude their inadvertent installation on TC products prior to TC issuance.

c. The method of monitoring the segregated storage and storage conditions of parts at the destination facility.

d. The method of recall and updating parts to the current configuration that do not meet approved design at the time of TC issuance. This method, should ensure proper disposition to preclude installation in TC products or parts unless they are updated to the current configuration.

- e. The method of notifying facilities, where parts were shipped prior to TC issuance, concerning the approval status of parts after TC issuance.

/s/

Frank P. Paskiewicz
Acting Manager, Production and Airworthiness
Certification Division